

Fire Protection for the Built Environment

Standards in Trade Workshop
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Conformity Assessment and Ensuring Product Integrity

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Roles in Ensuring Product Integrity

- **Manufacturers and Suppliers** – Design materials/products for compliance with applicable standards, code compatibility and control production quality
- **Conformity Assessment Organizations** – Provide confidence of compliance with standards and code compatibility
- **Architects** – Design structures in accordance with codes and specify compliant materials/products
- **Builders** – Use compliant materials/products and comply with codes
- **Authorities Having Jurisdictions (Inspectors)** – Evaluate compliance of structure with codes including verification of compliant materials/products

Combustible Materials for Use in Air-Handling Spaces (Plenums)



UL 2043 -- Fire Test for Heat and Visible Smoke Release for Discrete Product and their Accessories Installed in Air-Handling Spaces



Sources of Integrity - Confidence

- Manufacturer's and supplier's reputation
- Architect's and builder's reputation
- Effective codes and standards
- Product/material certification
 - Third party testing
 - Surveillance systems
- Code enforcement by Authorities Having Jurisdiction

Floor Assembly Furnace



Roofing Materials



Test Standards

Fire-Resistance Characteristics
UL 790 -- Tests for Fire Resistance of Roof-Covering Materials (ASTM E108/NFPA 256)
UL 1256 -- Fire Test of Roof Deck Constructions' Wind Resistance
Wind Resistance
UL 580 -- Tests for Uplift Resistance of Roof Assemblies
UL 997 -- Wind Resistance of Prepared Roof-Covering Materials
UL 1897 -- Uplift Tests for Roof-Covering Systems
Material/Product Physical Performance Properties
UL 55A -- Materials for Built-Up Roof Coverings
UL 2218 -- Impact Resistance of Prepared Roof Covering Materials
ASTM and other nationally recognized Standards

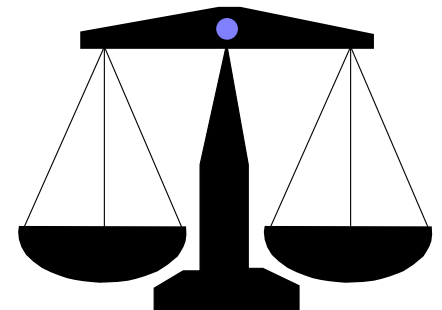


Conformity Assessment

Must meet the needs of dual customer sets

- Consumers, users, builders and Authorities Having Jurisdiction – need confidence that materials and products meet standards
- Manufacturers and suppliers – need efficient and effective conformity assessment services that provide the needed confidence of compliance to their customers and authorities having jurisdiction

This dual customer set with their different needs makes competence and integrity a significant factor in the choice of conformity assessment providers. Cost, service and timeliness are also considerations.





Panel Discussion Objectives

- **Enhance the understanding of how systems facilitate integrity and confidence in materials', products' and structures' compliance with codes and standards to meet public safety objectives.**
- **Have a dialog on the strength and weaknesses of our (China and US) and other systems for achieving the needed integrity and confidence.**
- **Identify opportunities to enhance the compatibility of these systems**